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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,585	08/15/2001	Stephen D. O'Connor	266/263	2200
32763	7590	08/11/2004	EXAMINER	
NANOSTREAM, INC. 580 SIERRA MADRE VILLA AVE. PASADENA, CA 91107-2928			WOOD, KEVIN S	
			ART UNIT	PAPER NUMBER
			2874	

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/931,585

Applicant(s)

O'CONNOR ET AL.

Examiner

Kevin S Wood

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5,7-10,13,14,21,24-27,30,32,33,36 and 42-61 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) See Continuation Sheet are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Continuation of Disposition of Claims: Claims subject to restriction and/or election requirement are 5,7-10,13,14,21,24-27,30,32,33,36 and 42-61.

DETAILED ACTION

Response to Amendment

1. This action is responsive to the Applicant's Amendment filed on 20 May 2004. Claim 20 has been cancelled. Claims 21 and 56-58 have been amended. Claims 5, 7-10, 13, 14, 21, 24-27, 30, 32, 33, 36, and 42-61 are pending in the application.

Response to Arguments

2. Applicant's arguments with respect to claims 5, 7-10, 13, 14, 21, 24-27, 30, 32, 33, 36, and 42-61 have been considered but are moot in view of this restriction. The present application has claimed 5 distinct inventions. The applicant is advised to elect a single invention and cancel the claims for the non-elected inventions.

Election/Restrictions

3. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 5, 10, 13, 42,44,45, and 46-52, drawn to a microfluidic optical systems wherein a plurality fluids are substantially mixed in order to affect light incident on the fluids, classified in class 385, subclass 140.
 - II. Claims 7-9, 14, 24, 26, 27 and 53-55, drawn to a microfluidic system and a method of optical switching using immiscible fluids defining a discrete plug, where a deformable flexible member manipulates the plug, classified in class 385, subclass 19.

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- III. Claim 25, drawn to a method for performing optical switching, using immiscible fluids defining a discrete plug, where a plurality of electrodes are used to manipulate the plug, classified in class 385, subclass 19.
- IV. Claims 30, 32, 33 and 36, drawn to a method for performing optical switching using a deformable member that is substantially reflective, classified in class 385, subclass 18.
- V. Claims 56, 21 and 57-61, drawn to an optical processing system having a sensor and a feedback signal, classified in class 385, subclass 16.

The inventions are distinct, each from the other because of the following reasons:

- 4. Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as an optical attenuator. See MPEP § 806.05(d).
- 5. Inventions I and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as optical attenuator. See MPEP § 806.05(d).
- 6. Inventions I and IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as an optical attenuator. See MPEP § 806.05(d).

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7. Inventions I and V are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as an optical attenuator. See MPEP § 806.05(d).

8. Inventions II and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention II has separate utility such as an optical switch without electrodes. See MPEP § 806.05(d).

9. Inventions II and IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as optical switch. See MPEP § 806.05(d).

10. Inventions II and V are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as an optical switch without a feedback system. See MPEP § 806.05(d).

11. Inventions III and IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention III has separate utility such as an optical switch. See MPEP § 806.05(d).

12. Inventions III and V are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are

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shown to be separately usable. In the instant case, invention III has separate utility such as optical switch without a feedback system. See MPEP § 806.05(d).

13. Inventions IV and V are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention IV has separate utility such as an optical switch without a feedback system. See MPEP § 806.05(d).

14. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Groups II, III, IV and V, restriction for examination purposes as indicated is proper.

15. Because these inventions are distinct for the reasons given above and the search required for Group II is not required for Groups I, III, IV and V, restriction for examination purposes as indicated is proper.

16. Because these inventions are distinct for the reasons given above and the search required for Group III is not required for Groups I, II, IV and V, restriction for examination purposes as indicated is proper.

17. Because these inventions are distinct for the reasons given above and the search required for Group IV is not required for Groups I, II, III and V, restriction for examination purposes as indicated is proper.

18. Because these inventions are distinct for the reasons given above and the search required for Group V is not required for Groups I, II, III and IV, restriction for examination purposes as indicated is proper.

19. A telephone call was made to Vincent Gustafson on 8/6/04 to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

20. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Conclusion


21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin S Wood whose telephone number is (571) 272-2364. The examiner can normally be reached on Monday-Thursday (7am - 5:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney B Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KSW


AKM ENAYET ULLAH
PRIMARY EXAMINER